

# NARRATIVE REPORT

## 1.0 BUILDING INFORMATION

Hastings Hall was originally constructed in 1955; although specific information could not be located, several renovations are evident (including the addition of a greenhouse on the west side of the building around 1973).

Hastings Hall is a two-story, 10,190 ft<sup>2</sup> building which primarily serves as office areas and work areas for agricultural/transportation personnel.

The interior floor finishes included floor tile, carpet, and concrete; the interior wall finishes included gypsum wallboard, concrete, plaster, and brick; and the interior ceiling finishes included ceiling tile and plaster. The roofing system is a flat rubber-membrane roof and the exterior of the structure is brick.

The piping systems were insulated; fiberglass insulation (without hard fittings) and aircell insulation (with hard fittings) are located in the building. Steam enters the building via a pit into room 106B and domestic water enters the building in room 106B. HVAC systems located in the building consisted of steam unit heaters, steam radiators, and forced air furnaces equipped with heating/cooling coils.

## 2.0 ASBESTOS SURVEY INFORMATION

Hastings Hall was surveyed as part of a larger project on NDSU's Fargo, ND Campus. This report is part of "Volume 9" of a nine volume series. This report includes building specific information only; please refer to the opening section of "Volume 9" for methodologies, definitions, and other pertinent supporting information.

A total of 89 samples were collected from suspect asbestos-containing materials (ACM) from the Hastings Hall on May 4, 2007, 13 additional samples were collected on September 12, 2007, 1 additional samples were collected on January 10, 2008, and 1 additional sample was collected on February 1, 2008. Laboratory analysis results indicate **22 of these samples tested positive for asbestos.**

### 2.1 Suspect Materials Identified and Sampled

|  |                                     |
|--|-------------------------------------|
| Hard Plaster- Monocoat                   | Gypsum Wallboard (8 types)          |
| Joint Compound (7 types)                 | Ceiling Texture (2 types)           |
| Wall Texture                             | Hard Plaster- Basecoat (3 types)    |
| Hard Plaster- Skimcoat (2 types)         | Ceiling Tile (4 types)              |
| Window Caulk (2 types)                   | Window Caulk                        |
| Aircell Pipe Insulation                  | Hard Fittings on Aircell Insulation |
| Sink Undercoating (3 types)              | Floor Tile (3 types)                |
| Floor Tile Mastic (3 types)              | Carpet Mastic                       |
| Baseboard Adhesive                       | Gray HVAC Duct Caulk                |
| Tar Pipe Wrap                            | Penetration Putty (on AHU)          |
| Exterior Building Seam Caulk (2 types)   | Exterior Window Caulk               |
| Exterior Door Caulk                      | Exterior Foundation Coating         |
| Exterior Penetration Putty (on AC lines) | Window Sill Material                |
| Greenhouse Window Glazing                |                                     |

The Asbestos Bulk Sample Results Table includes asbestos sampling data.

2.2 **Asbestos Containing Materials**

- Joint Compound (1 type)
- Acoustic Ceiling Texture
- Rough Acoustic Ceiling Texture
- Window Caulk (1 type)
- Window Glazing
- Aircell Pipe Insulation
- Hard Fittings on Aircell Insulation
- Black Sink Undercoating
- Pink Sink Undercoating
- Mastic for 12" White/Beige Floor Tile with Gray Marks
- Greenhouse Window Glazing
- 9" Floor Tile and Mastic (assumed)

The ACM Locations/ Friable Materials Assessments Table includes ACM locations data.

2.3 **Cost Estimates**

Legend Technical Services Inc. estimates abatement costs (removal & disposal) of ACM for Hastings Hall as follows:

| ACM  | QUANTITY              | UNIT COST              | TOTAL COST         |
|--|-----------------------|------------------------|--------------------|
| Asbestos Joint Compound                      | 530 ft <sup>2</sup>   | \$5.00/ft <sup>2</sup> | \$2,650.00         |
| Asbestos Ceiling Texture                     | 5,556 ft <sup>2</sup> | \$7.50/ft <sup>2</sup> | \$41,670.00        |
| Asbestos Window Caulk                        | 7 ea                  | \$125.00/ea            | \$875.00           |
| Asbestos Window Glazing                      | 7 ea                  | \$225.00/ea            | \$1,575.00         |
| Asbestos Aircell Pipe Insulation             | 321 ft                | \$25.00/ea             | \$8,025.00         |
| Asbestos Hard Fittings on Aircell Insulation | 37 ea                 | \$25.00/ea             | \$925.00           |
| Asbestos Sink Undercoating                   | 2 ea                  | \$150.00/ea            | \$300.00           |
| Asbestos Floor Tile and/or Floor Tile Mastic | 4,733 ft <sup>2</sup> | \$4.00/ft <sup>2</sup> | \$18,932.00        |
| Asbestos Greenhouse Window Glazing           | 30 ea                 | \$25.00/ea             | \$750.00           |
| <b>Total Estimated Abatement Costs:</b>      |                       |                        | <b>\$75,702.00</b> |

2.4 **Survey Notes**

Joint Compound on gypsum wallboard was sampled throughout the building from multiple renovation projects. The joint compound on the gypsum wallboard walls shared by room 200 and room 200C contains asbestos, only.

LEGEND observed transite panels in the building (primarily in the greenhouse) being used as mobile workbenches. These transite panels are not building materials and were not sampled or quantified by LEGEND during the asbestos survey. LEGEND recommends assuming these materials to be ACM.

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM | ASBESTOS TYPE | EST.<br>QUANTITY | ACM TYPE | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSESS.<br>CAT. <sup>1</sup> | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

**Room 102** Abated June 2020

|   |                |       |                |      |             |   |   |  |
|---|----------------|-------|----------------|------|-------------|---|---|--|
| <del>Aircell Pipe Insulation</del>                              | 80% Chrysotile | 75 ft | Friable<br>TSI | Good | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the north and west walls. |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Insulation</del> | 40% Chrysotile | 14 ea | Friable<br>TSI | Good | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | None.  |
|   |                |       |                |      | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |

**Room 102A** Abated June 2020

|  |               |       |                              |      |      |      |      |   |
|--|---------------|-------|------------------------------|------|------|------|------|---|
| <del>Window Caulk</del>                  | 2% Chrysotile | 7 ea  | Non-Friable<br>Miscellaneous | N/A* | N/A* | N/A* | N/A* | The windows on the east side of the room have the asbestos caulk on them.                     |
| <del>Window Glazing</del>                | 3% Chrysotile | 7 ea  | Non-Friable<br>Miscellaneous | N/A* | N/A* | N/A* | N/A* | The windows on the east side of the room have the asbestos glazing on them.                   |
| <del>Greenhouse Window<br/>Glazing</del> | 5% Chrysotile | 30 ea | Non-Friable<br>Miscellaneous | N/A* | N/A* | N/A* | N/A* | The greenhouse windows on the south and west walls of the room have asbestos glazing on them. |

**Room 102A Entry** Abated June 2020

|                                    |                |      |                |      |             |   |   |   |
|------------------------------------|----------------|------|----------------|------|-------------|---|---|---|
| <del>Aircell Pipe Insulation</del> | 80% Chrysotile | 6 ft | Friable<br>TSI | Good | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 5 | The aircell pipe insulation runs along the northwest corner in the southwest entry. |
|                                    |                |      |                |      | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |   |
|                                    |                |      |                |      | Vibration   | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |   |

**Room 106** Abated June 2020

|   |                |                       |                      |         |             |   |   |  |
|---|----------------|-----------------------|----------------------|---------|-------------|---|---|--|
| <del>Acoustic Ceiling<br/>Texture</del> | 8% Chrysotile  | 1,075 ft <sup>2</sup> | Friable<br>Surfacing | Damaged | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 2 | The acoustic ceiling texture is above the ceiling tiles.   |
| <del>Aircell Pipe Insulation</del>      | 80% Chrysotile | 20 ft                 | Friable<br>TSI       | Good    | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the northwest corner in room 106. |
|   |                |                       |                      |         | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |

\* = Non-Friable materials were not assessed

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM | ASBESTOS TYPE | EST.<br>QUANTITY | ACM TYPE | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSES.<br>CAT. <sup>1</sup> | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|-----------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|-----------------------------|-------|

|  |                |      |                |      |             |   |   |       |
|--|----------------|------|----------------|------|-------------|---|---|-------|
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 3 ea | Friable<br>TSI | Good | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | None. |
|  |                |      |                |      | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |       |
|  |                |      |                |      | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |       |

**Room 106A** Abated June 2020

|   |         |                    |                              |      |      |      |      |  |
|---|---------|--------------------|------------------------------|------|------|------|------|--|
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed | 60 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A* | N/A* | N/A* | The 9" floor tile and the mastic were assumed to contain asbestos. |
|---|---------|--------------------|------------------------------|------|------|------|------|--|

**Room 106B** Abated June 2020

|  |                |                     |                              |      |             |   |      |  |
|--|----------------|---------------------|------------------------------|------|-------------|---|------|--|
| <del>Mastic for 12" White<br/>&amp; Beige Floor Tile</del>           | 5% Chrysotile  | 162 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A*        | N/A*  | N/A* | Only the black mastic under the floor tile is positive for asbestos. |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 30 ft               | Friable<br>TSI               | Good | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5    | The aircell pipe insulation runs along the north wall in room 106B.  |
|  |                |                     |                              |      | Air Erosion | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |      |  |
|  |                |                     |                              |      | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |      |  |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 6 ea                | Friable<br>TSI               | Good | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5    | None   |
|  |                |                     |                              |      | Air Erosion | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |      |  |
|  |                |                     |                              |      | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |      |  |

**Room 106C** Abated June 2020

|  |                |                     |                              |      |             |   |      |  |
|--|----------------|---------------------|------------------------------|------|-------------|---|------|--|
| <del>9" Floor Tile and<br/>Mastic</del>                              | Assumed        | 180 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A*        | N/A*  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos.               |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 25 ft               | Friable<br>TSI               | Good | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5    | The aircell pipe insulation runs along the north and east wall in room 106C. |
|  |                |                     |                              |      | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |      |  |
|  |                |                     |                              |      | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |      |  |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 3 ea                | Friable<br>TSI               | Good | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5    | None.  |
|  |                |                     |                              |      | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |      |  |
|  |                |                     |                              |      | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |      |  |

\* = Non-Friable materials were not assessed

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM | ASBESTOS TYPE | EST.<br>QUANTITY | ACM TYPE | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSESS.<br>CAT. <sup>1</sup> | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

**Room 106D** Abated June 2020

|  |                |                     |                      |         |             |   |   |   |
|--|----------------|---------------------|----------------------|---------|-------------|---|---|---|
| <del>Acoustic Ceiling<br/>Texture</del>                              | 8% Chrysotile  | 110 ft <sup>2</sup> | Friable<br>Surfacing | Damaged | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 2 | The acoustic ceiling texture is above the ceiling tiles.  |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 48 ft               | Friable<br>TSI       | Good    | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the north and east walls in room 106D. |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 13 ea               | Friable<br>TSI       | Good    | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | None.   |
|  |                |                     |                      |         | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |   |
|  |                |                     |                      |         | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |   |
|  |                |                     |                      |         | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |   |

**Room 106E** Abated June 2020

|  |                |                     |                      |         |             |   |   |  |
|--|----------------|---------------------|----------------------|---------|-------------|---|---|--|
| <del>Acoustic Ceiling<br/>Texture</del>                              | 8% Chrysotile  | 120 ft <sup>2</sup> | Friable<br>Surfacing | Damaged | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 2 | The acoustic ceiling texture is above the ceiling tiles.   |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 23 ft               | Friable<br>TSI       | Good    | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the east wall in room 106E. |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 5 ea                | Friable<br>TSI       | Good    | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | None.  |
|  |                |                     |                      |         | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |
|  |                |                     |                      |         | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |  |
|  |                |                     |                      |         | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |

**Room 106F** Abated June 2020

|  |                |                     |                      |         |             |   |   |  |
|--|----------------|---------------------|----------------------|---------|-------------|---|---|--|
| <del>Acoustic Ceiling<br/>Texture</del>                              | 8% Chrysotile  | 140 ft <sup>2</sup> | Friable<br>Surfacing | Damaged | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 2 | The acoustic ceiling texture is above the ceiling tiles.   |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 12 ft               | Friable<br>TSI       | Good    | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the east wall in room 106F. |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 1 ea                | Friable<br>TSI       | Good    | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | None.  |
|  |                |                     |                      |         | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |
|  |                |                     |                      |         | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |  |
|  |                |                     |                      |         | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |

\* = Non-Friable materials were not assessed

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM | ASBESTOS TYPE | EST.<br>QUANTITY | ACM TYPE | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSESS.<br>CAT. <sup>1</sup> | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

**Room 106G** Including 106G2 & 106G3 Abated June 2020

|  |                |                     |                      |         |             |   |   |   |
|--|----------------|---------------------|----------------------|---------|-------------|---|---|---|
| <del>Acoustic Ceiling<br/>Texture</del>                              | 8% Chrysotile  | 425 ft <sup>2</sup> | Friable<br>Surfacing | Damaged | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 2 | The acoustic ceiling texture is above the ceiling tiles.  |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 48 ft               | Friable<br>TSI       | Good    | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the south wall in room 106G. |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 7 ea                | Friable<br>TSI       | Good    | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | None.   |
|  |                |                     |                      |         | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |   |
|  |                |                     |                      |         | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |   |
|  |                |                     |                      |         | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |   |

**Room 106G1** Abated June 2020

|  |                |                     |                      |         |             |   |   |  |
|--|----------------|---------------------|----------------------|---------|-------------|---|---|--|
| <del>Acoustic Ceiling<br/>Texture</del>                              | 8% Chrysotile  | 168 ft <sup>2</sup> | Friable<br>Surfacing | Damaged | Physical    | <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | 2 | The acoustic ceiling texture is above the ceiling tiles.   |
| <del>Aircell Pipe Insulation</del>                                   | 80% Chrysotile | 34 ft               | Friable<br>TSI       | Good    | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5 | The aircell pipe insulation is above the ceiling tile and runs along the south and east walls in room 106G1. |
| <del>Hard Fittings/<br/>Hangars on Aircell<br/>Pipe Insulation</del> | 40% Chrysotile | 7 ea                | Friable<br>TSI       | Good    | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | 5 | None.  |
|  |                |                     |                      |         | Physical    | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |
|  |                |                     |                      |         | Air Erosion | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |   |  |
|  |                |                     |                      |         | Vibration   | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> |   |  |

**Hallway 188 (including the south stairway)** Abated June 2020

|   |               |                     |                              |         |             |   |      |  |
|---|---------------|---------------------|------------------------------|---------|-------------|---|------|--|
| <del>Acoustic Ceiling<br/>Texture</del> | 8% Chrysotile | 194 ft <sup>2</sup> | Friable<br>Surfacing         | Damaged | Physical    | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 5    | None   |
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed       | 194 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A*    | Air Erosion | <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |
|   |               |                     |                              |         | Vibration   | <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |      |  |
|   |               |                     |                              |         | N/A*        |   | N/A* |  |

\* = Non-Friable materials were not assessed

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM | ASBESTOS TYPE | EST.<br>QUANTITY | ACM TYPE | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSESS.<br>CAT. <sup>1</sup> | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

**Room 200 (including the northeast hallway) Abated June 2020**

|   |               |                       |                              |         |  |  |      |   |
|---|---------------|-----------------------|------------------------------|---------|--|--|------|---|
| <del>Acoustic Ceiling<br/>Texture</del> | 8% Chrysotile | 2,052 ft <sup>2</sup> | Friable<br>Surfacing         | Damaged | Physical <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Air Erosion <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Vibration <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |  | 2    | None  |
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed       | 2,052 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A*    | N/A*   |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos.                                    |
| <del>Joint Compound</del>               | 3% Chrysotile | 270 ft <sup>2</sup>   | Non-Friable<br>Surfacing     | N/A*    | N/A*   |  | N/A* | The joint compound is on the east end of the this room; it is on the walls that border room 200C. |

**Room 200A Abated June 2020**

|   |               |                     |                              |      |  |  |      |  |
|---|---------------|---------------------|------------------------------|------|--|--|------|--|
| <del>Acoustic Ceiling<br/>Texture</del> | 8% Chrysotile | 121 ft <sup>2</sup> | Friable<br>Surfacing         | Good | Physical <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Air Erosion <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Vibration <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |  | 5    | None   |
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed       | 121 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A*   |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |

**Room 200C Abated June 2020**

|   |               |                     |                              |         |  |  |      |  |
|---|---------------|---------------------|------------------------------|---------|--|--|------|--|
| <del>Acoustic Ceiling<br/>Texture</del> | 8% Chrysotile | 144 ft <sup>2</sup> | Friable<br>Surfacing         | Damaged | Physical <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br>Air Erosion <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/><br>Vibration <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |  | 2    | None   |
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed       | 144 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A*    | N/A*   |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos.       |
| <del>Joint Compound</del>               | 3% Chrysotile | 260 ft <sup>2</sup> | Non-Friable<br>Surfacing     | N/A*    | N/A*   |  | N/A* | The joint compound is only on the north and west walls in room 200C. |

\* = Non-Friable materials were not assessed

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM | ASBESTOS TYPE | EST.<br>QUANTITY | ACM TYPE | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSESS.<br>CAT. <sup>1</sup> | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

**Room 201** Abated June 2020

|   |               |                     |                              |      |             |     |      |  |
|---|---------------|---------------------|------------------------------|------|-------------|-----|------|--|
| <del>Rough Acoustic<br/>Ceiling Texture</del> | 8% Chrysotile | 225 ft <sup>2</sup> | Friable<br>Surfacing         | Good | Physical    | ■□□ | 5    | None   |
|   |               |                     |                              |      | Air Erosion | □■□ |      |  |
|   |               |                     |                              |      | Vibration   | ■□□ |      |  |
| <del>9" Floor Tile and<br/>Mastic</del>       | Assumed       | 225 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A*        |     | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |

**Room 202** Abated June 2020

|   |         |                     |                              |      |      |  |      |  |
|---|---------|---------------------|------------------------------|------|------|--|------|--|
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed | 425 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A* |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |
|---|---------|---------------------|------------------------------|------|------|--|------|--|

**Room 202B** Abated June 2020

|   |         |                     |                              |      |      |  |      |  |
|---|---------|---------------------|------------------------------|------|------|--|------|--|
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed | 110 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A* |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |
|---|---------|---------------------|------------------------------|------|------|--|------|--|

**Room 204** Abated June 2020

|   |               |                     |                              |      |             |     |      |  |
|---|---------------|---------------------|------------------------------|------|-------------|-----|------|--|
| <del>Rough Acoustic<br/>Ceiling Texture</del> | 8% Chrysotile | 240 ft <sup>2</sup> | Friable<br>Surfacing         | Good | Physical    | ■□□ | 5    | None   |
|   |               |                     |                              |      | Air Erosion | □■□ |      |  |
|   |               |                     |                              |      | Vibration   | ■□□ |      |  |
| <del>9" Floor Tile and<br/>Mastic</del>       | Assumed       | 240 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A*        |     | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |

**Room 204A** Abated June 2020

|   |               |                     |                      |      |             |     |   |      |
|---|---------------|---------------------|----------------------|------|-------------|-----|---|------|
| <del>Rough Acoustic<br/>Ceiling Texture</del> | 8% Chrysotile | 169 ft <sup>2</sup> | Friable<br>Surfacing | Good | Physical    | ■□□ | 5 | None |
|   |               |                     |                      |      | Air Erosion | □■□ |   |      |
|   |               |                     |                      |      | Vibration   | ■□□ |   |      |

\* = Non-Friable materials were not assessed



**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM                        | ASBESTOS TYPE | EST.<br>QUANTITY    | ACM TYPE                     | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSES.<br>CAT. <sup>1</sup> | NOTES  |
|-------------------------------------|---------------|---------------------|------------------------------|-----------------------|---------------------|--------------------|-----------------------------|--|
| <del>9" Floor Tile and Mastic</del> | Assumed       | 169 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A*                  | N/A*                |                    | N/A*                        | The 9" floor tile and mastic were assumed to contain asbestos. |

**Room 206** Abated June 2020

|                                     |                |                     |                              |      |      |  |      |  |
|-------------------------------------|----------------|---------------------|------------------------------|------|------|--|------|--|
| <del>9" Floor Tile and Mastic</del> | Assumed        | 143 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A* |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |
| <del>Black Sink Undercoating</del>  | 15% Chrysotile | 1 ea                | Non-Friable<br>Miscellaneous | N/A* | N/A* |  | N/A* | The sink is along the north wall, west end of room 206.        |

**Room 208** Abated June 2020

|                                     |                |                     |                              |      |      |  |      |  |
|-------------------------------------|----------------|---------------------|------------------------------|------|------|--|------|--|
| <del>9" Floor Tile and Mastic</del> | Assumed        | 195 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A* |  | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |
| <del>Pink Sink Undercoating</del>   | 15% Chrysotile | 1 ea                | Non-Friable<br>Miscellaneous | N/A* | N/A* |  | N/A* | The sink is along the north wall, west end of room 208.        |

**Hallway 288** Abated June 2020

|                                     |               |                     |                              |      |             |     |      |  |
|-------------------------------------|---------------|---------------------|------------------------------|------|-------------|-----|------|--|
| <del>Acoustic Ceiling Texture</del> | 8% Chrysotile | 193 ft <sup>2</sup> | Friable<br>Surfacing         | Good | Physical    | ■□□ | 5    | None   |
|                                     |               |                     |                              |      | Air Erosion | □■□ |      |  |
|                                     |               |                     |                              |      | Vibration   | ■□□ |      |  |
| <del>9" Floor Tile and Mastic</del> | Assumed       | 193 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A* | N/A*        |     | N/A* | The 9" floor tile and mastic were assumed to contain asbestos. |

**Northeast Stairwell** Abated June 2020

|                                     |               |                     |                      |      |             |     |   |      |
|-------------------------------------|---------------|---------------------|----------------------|------|-------------|-----|---|------|
| <del>Acoustic Ceiling Texture</del> | 8% Chrysotile | 180 ft <sup>2</sup> | Friable<br>Surfacing | Good | Physical    | ■□□ | 5 | None |
|                                     |               |                     |                      |      | Air Erosion | □■□ |   |      |
|                                     |               |                     |                      |      | Vibration   | ■□□ |   |      |

\* = Non-Friable materials were not assessed

**LEGEND TECHNICAL SERVICES, INC.**  
 ACM LOCATIONS/Friable MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
 HASTINGS HALL (BUILDING A087)

| ROOM/<br>ACM                            | ASBESTOS TYPE | EST.<br>QUANTITY    | ACM TYPE                     | MATERIAL<br>CONDITION | DAMAGE<br>POTENTIAL | LOW<br>MOD<br>HIGH | ASSESS.<br>CAT. <sup>1</sup> | NOTES  |
|---|---------------|---------------------|------------------------------|-----------------------|---------------------|--------------------|------------------------------|--|
| <del>9" Floor Tile and<br/>Mastic</del> | Assumed       | 180 ft <sup>2</sup> | Non-Friable<br>Miscellaneous | N/A*                  | N/A*                |                    | N/A*                         | The 9" floor tile and mastic were assumed to contain asbestos. |

<sup>1</sup>Assessment Categories:

- |   |   |
|---|---|
| 1) Damaged or Significantly Damaged TSI ACM                   | 5) ACM with Potential for Damage                      |
| 2) Damaged Friable Surfacing ACM                              | 6) ACM with Potential for Significant Damage          |
| 3) Significantly Damaged Friable Surfacing ACM                | 7) Any Remaining Friable ACM or Friable Suspected ACM |
| 4) Damaged or Significantly Damaged Friable Miscellaneous ACM |   |

**End**

\* = Non-Friable materials were not assessed